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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/604,699

08/11/2003

James Allen Charnley JR.

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EXAMINER

FU, HAO

ART UNIT

PAPER NUMBER

3696

MAIL DATE

DELIVERY MODE

05/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/604,699	Applicant(s) CHARNLEY, JAMES ALLEN	
	Examiner HAO FU	Art Unit 3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10,11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, 10-11, and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

In the remarks and claims filed on 03/12/2009, the applicant's amendments successfully overcome the previous rejection based on U.S.C. 101 in light of *In re Bilski* (545 F.3d 943, 88 U.S.P.Q.2d 1385). However, after discussion with Supervisory Patent Examiner, Thomas Dixon, it is concluded that the present claims are still subject to U.S.C. 101 rejection, because the present claims do not produce a useful or tangible result.

Claim Objection

The applicants have amended the claim language by changing the word "securities" to "investment alternatives". The examiner believes this change is unnecessary, and it actually makes the claim language more confusing, because "investment alternatives" maybe mixed up with "allocation alternatives". The examiner advises the applicants to change the claim language back to "securities" to prevent future confusion.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3-8, 10-11, and 13-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For a claimed invention to be statutory, the claimed invention must produce a useful, tangible and concrete result. An invention which is eligible for patenting under 35 U.S.C. 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a useful, concrete and tangible result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a useful tangible and concrete result. See *AT&T v. Excel Communications Inc.*, 172 F.3d at 1358, 50 USPQ 2d at 1452 and *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d at 1373, 47 USPQ 2d at 1601 (Fed. Cir. 1998). The test for

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practical application as applied by the examiner involves the determination of the following factors.

a) “useful” – The Supreme Court in *Diamond v. Diehr* requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished. Applying utility case law the examiner will not that:

- i. utility need not be expressly recited in the claims, rather it may be inferred.
- ii. if the utility is not asserted in the written description, then it must be well established.

b) “tangible” – Applying *In re Warmerdam*, 33 F.3d 1354, 31 UAPQ 2d 1754 Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than manipulation of an abstract idea and is, therefore, nonstatutory under 35 U.S.C 101.

c) “concrete” – Another consideration is whether the invention produces a “concrete” result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

In the present case, the claims are neither useful nor tangible.

The present claims describe an invention that is not useful, because the claimed steps do not produce the intended result. In the preamble of the independent claims, it seems that the intended result of the invention is to generate comparative statistics of investment performance for a whole-population of available asset allocation alternatives over a plurality of analysis periods. However, the claimed steps Describe obtaining periodic performance of a plurality of securities, grouping the securities in sectors, and just calculating the periodic returns for all possible combinations of sectors. The claimed step does not disclose performing any comparison or point out which allocations have the best return. From Examiner Dixon’s point of view, the present invention is merely a manipulation and presentation of market data. Topical useful results in the trading art should include, but not limited to, providing advisory on optimum allocation, selecting the best allocation alternative, automatically purchasing the optimum allocation based on calculation, or etc.

The present claims also describe an invention that is not tangible, because they can be interpreted as simply mathematical construct claims, such as a disembodied data structure and method of making it. The claims involve no more than manipulation of an abstract idea and is, therefore, nonstatutory under 35 U.S.C 101. As discussed earlier, the present claimed steps only manipulate market data, but do not use the

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calculation result in anyway. The claims do not even suggest showing the calculation to the user.

Notes on Amended Features

After close review on the specification and drawing, the examiner finds the newly added feature, "determining a plurality of allocation alternatives which reside along an efficiency-line population of allocation alternatives," not a novel step. Figure 2 of the submitted drawing shows the efficiency-line, and arguably suggests this feature. Figure 2 is clearly indicated as prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAO FU whose telephone number is (571)270-3441. The examiner can normally be reached on Mon-Fri/Mon-Thurs 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dixon can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS A DIXON/
Supervisory Patent Examiner, Art Unit 3696

Hao Fu
Examiner
Art Unit 3696

MAY-09

/Hao Fu/
Examiner, Art Unit 3696